Application No.: 10/786,299 Docket No.: M4065.0984/P984

AMENDMENT TO THE CLAIMS

1. (Amended) A method of forming a contact in a pixel sensor cell, comprising:

depositing a passivation layer over a substrate having pixel components;

forming a slot <u>having sidewalls</u> in the passivation layer in an area over a charge collection region of said pixel sensor cell;

implanting a dopant at an angle relative to the sidewalls of the slot through said slot into said charge collection region; and

forming a contact within said slot.

- 2. (Amended) The method of claim 1, wherein a cross-section of said slot has an oblong shape.
- 3. (Amended) The method of claim 1, wherein a cross-section of said slot has an elliptical shape.
- 4. (Amended) The method of claim 1, wherein said slot has an aspect ratio having that is within a range of about 10:1 to 5:1.
- 5. (Original) The method of claim 1, wherein said dopant is implanted at an angle of about 20° relative to the sidewalls.
- 6. (Original) The method of claim 1, wherein said charge collection region is a floating diffusion region.
- 7. (Original) The method of claim 1, wherein said slot is etched in an insulator layer.
- 8. (Original) The method of claim 1, wherein said dopant is implanted at about 35 KeV.

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9. (Amended) The method of claim 1, wherein said dopant is implanted at an implant to a depth in the substrate of about 300 Å to about 400 Å.

- 10. (Original) The method of claim 1 wherein said dopant is phosphorous.
- 11. (Amended) A method of forming a contact in a pixel sensor cell comprising:

depositing a passivation layer over a substrate having pixel components;

forming a blocking layer extending over a portion of a charge collection region of said pixel sensor cell;

etching a slot, having sidewalls, into the passivation layer over said charge collection region, wherein said slot extends to contact said charge collection region over portions not covered by said blocking layer;

implanting a dopant at an angle relative to <u>the</u> sidewalls of the slot through said lot into said charge collection region; and

forming a contact within said slot.

- 12. (Original) The method of claim 11, wherein said blocking layer includes at least one of polysilicon and silicon nitride.
- 13. (Amended) The method of claim 11, wherein a cross-section of said slot has an oblong shape.
- 14. (Amended) The method of claim 11, wherein a cross-section of said slot has an elliptical shape.
- 15. (Amended) The method of claim 11, wherein said slot has an aspect ratio having that is within a range of about 10:1 to 5:1.

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16. (Original) The method of claim 11, wherein said dopant is implanted at an angle of about 20° relative to the sidewalls.

- 17. (Original) The method of claim 11, wherein said charge collection region is a floating diffusion region.
- 18. (Original) The method of claim 11, wherein said slot is etched in an insulator layer.
- 19. (Original) The method of claim 11, wherein said dopant is implanted at about 35 KeV.
- 20. (Amended) The method of claim 11, wherein said dopant is implanted at an implant to a depth in the substrate of about 300 Å to about 400 Å.
- 21. (Original) The method of claim 11, wherein said dopant is phosphorous.
- 22-38 (Canceled)